

(No Model.)

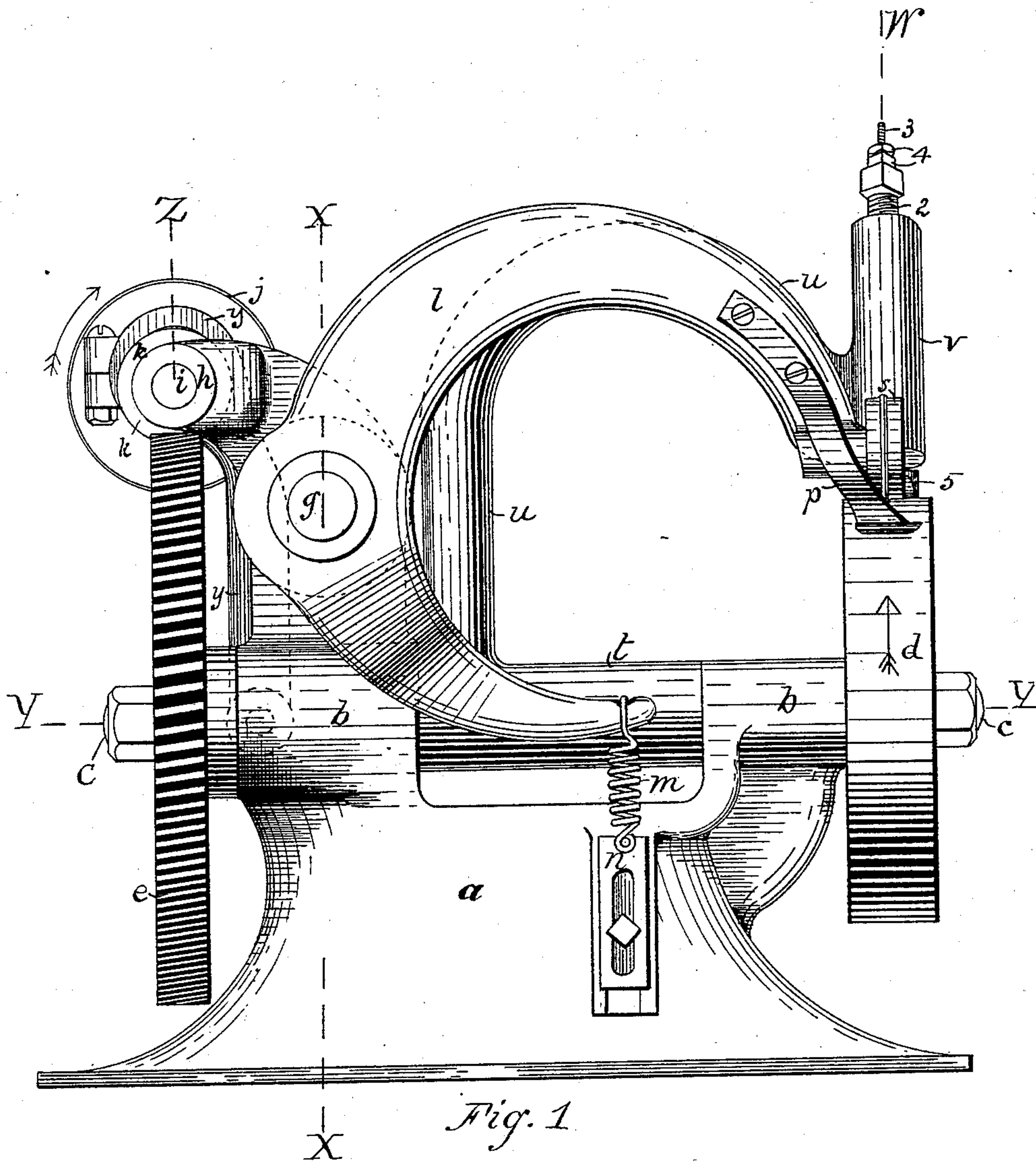
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W. Y. OBER.

MACHINE FOR FINISHING SEAMS.

No. 285,061.

Patented Sept. 18, 1883.



Witnesses:
Chas. I. Gooding.
Eugene Humphrey

Inventor:
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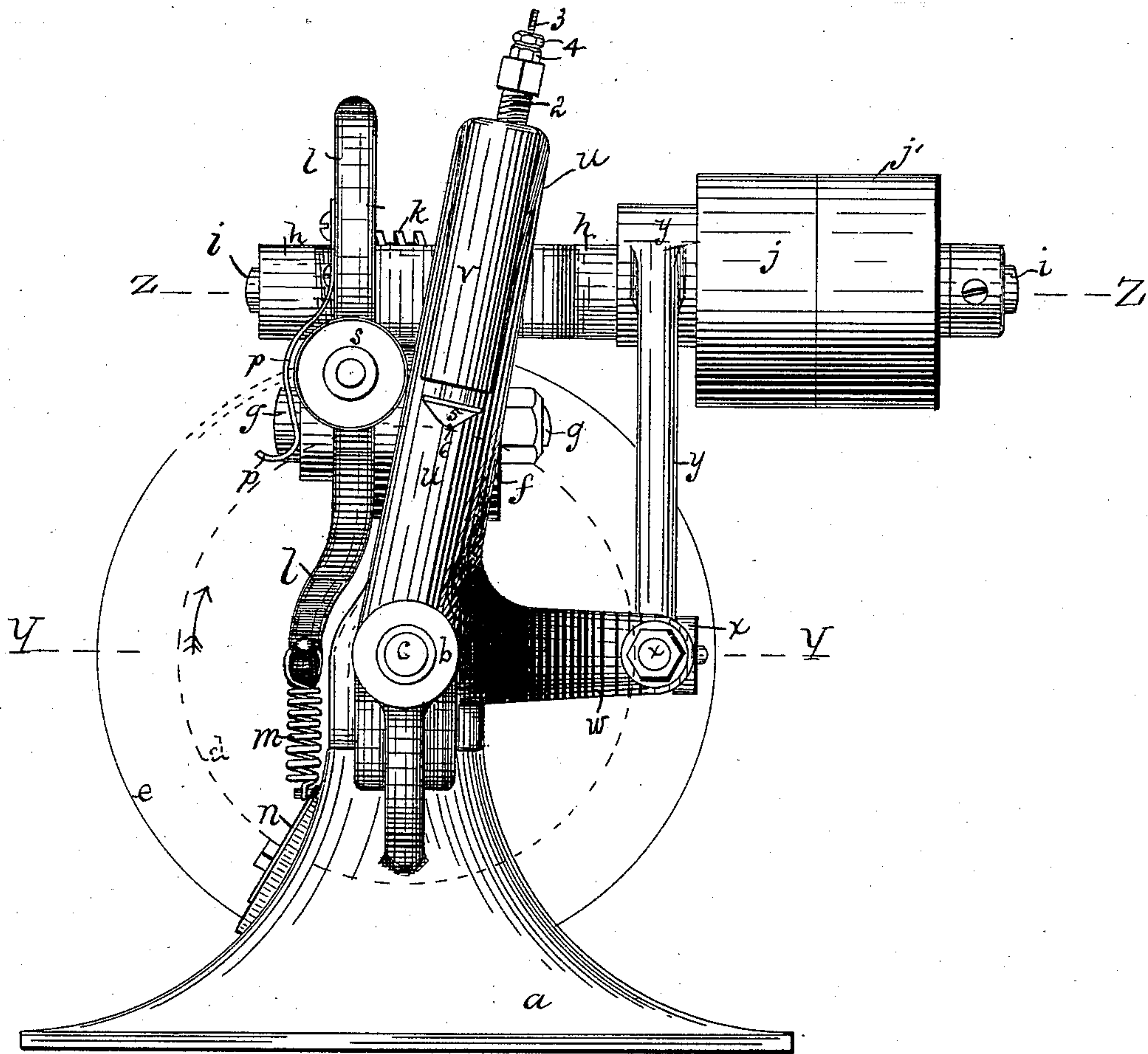


Fig. 2.

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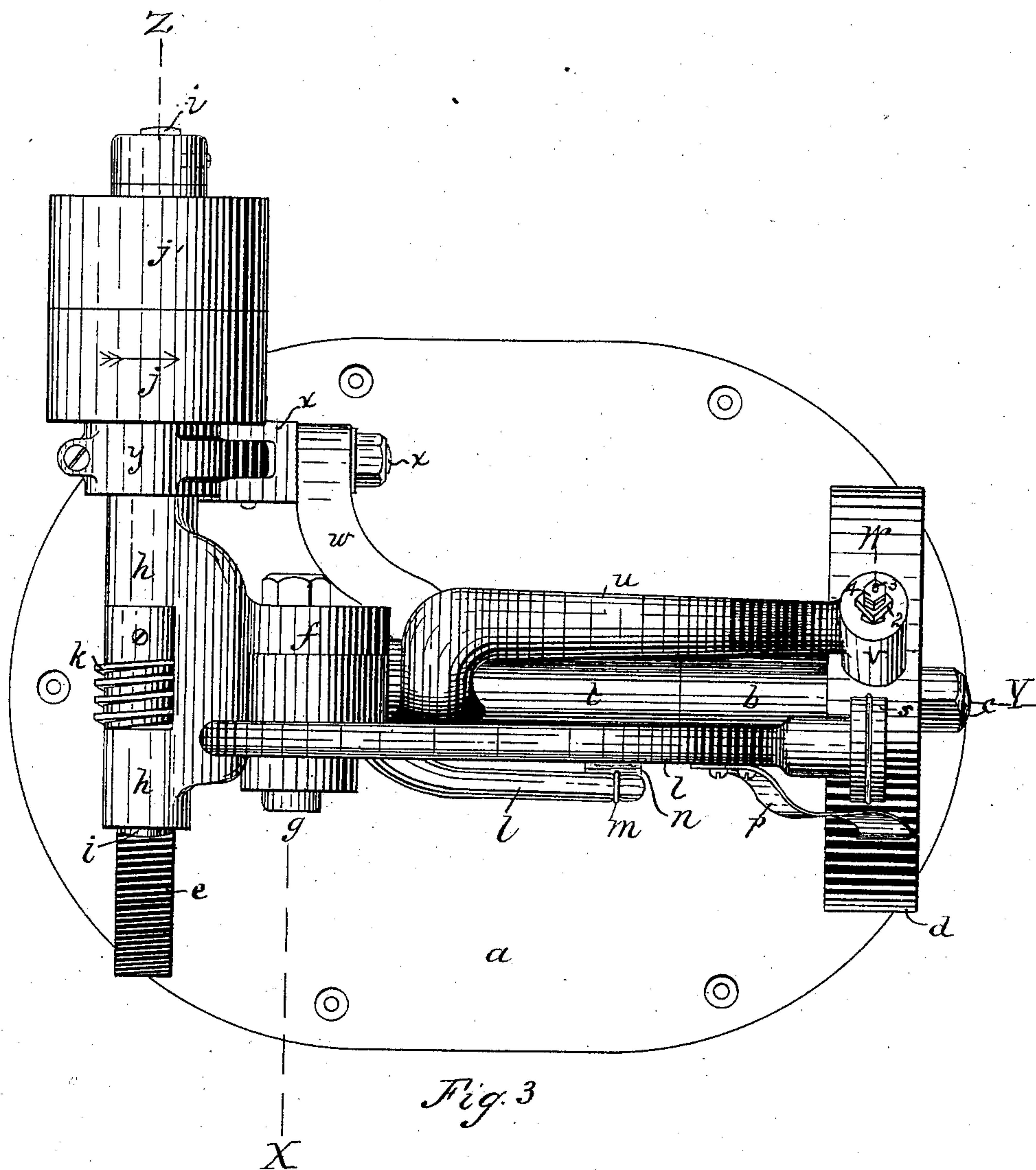


Fig. 3

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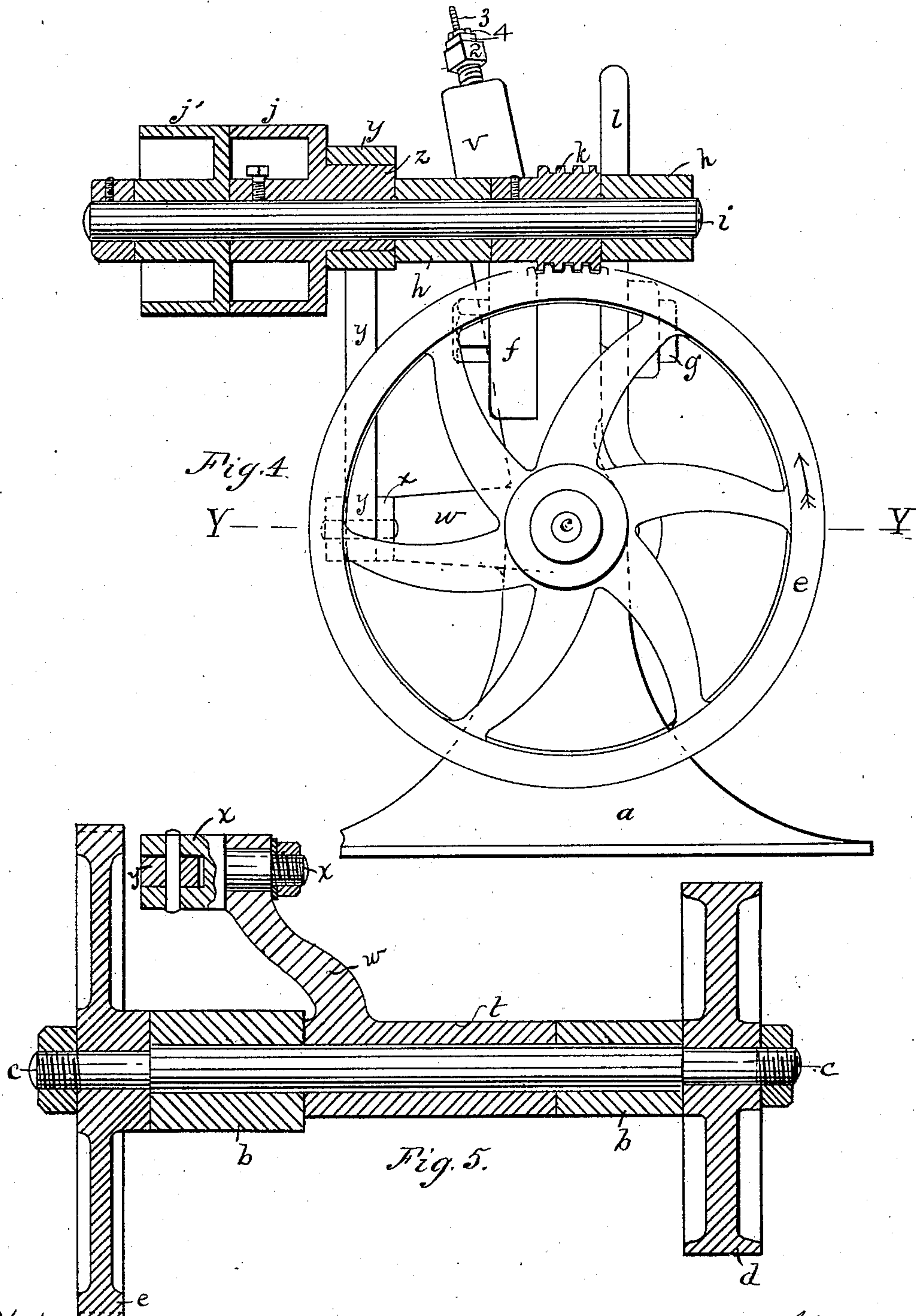
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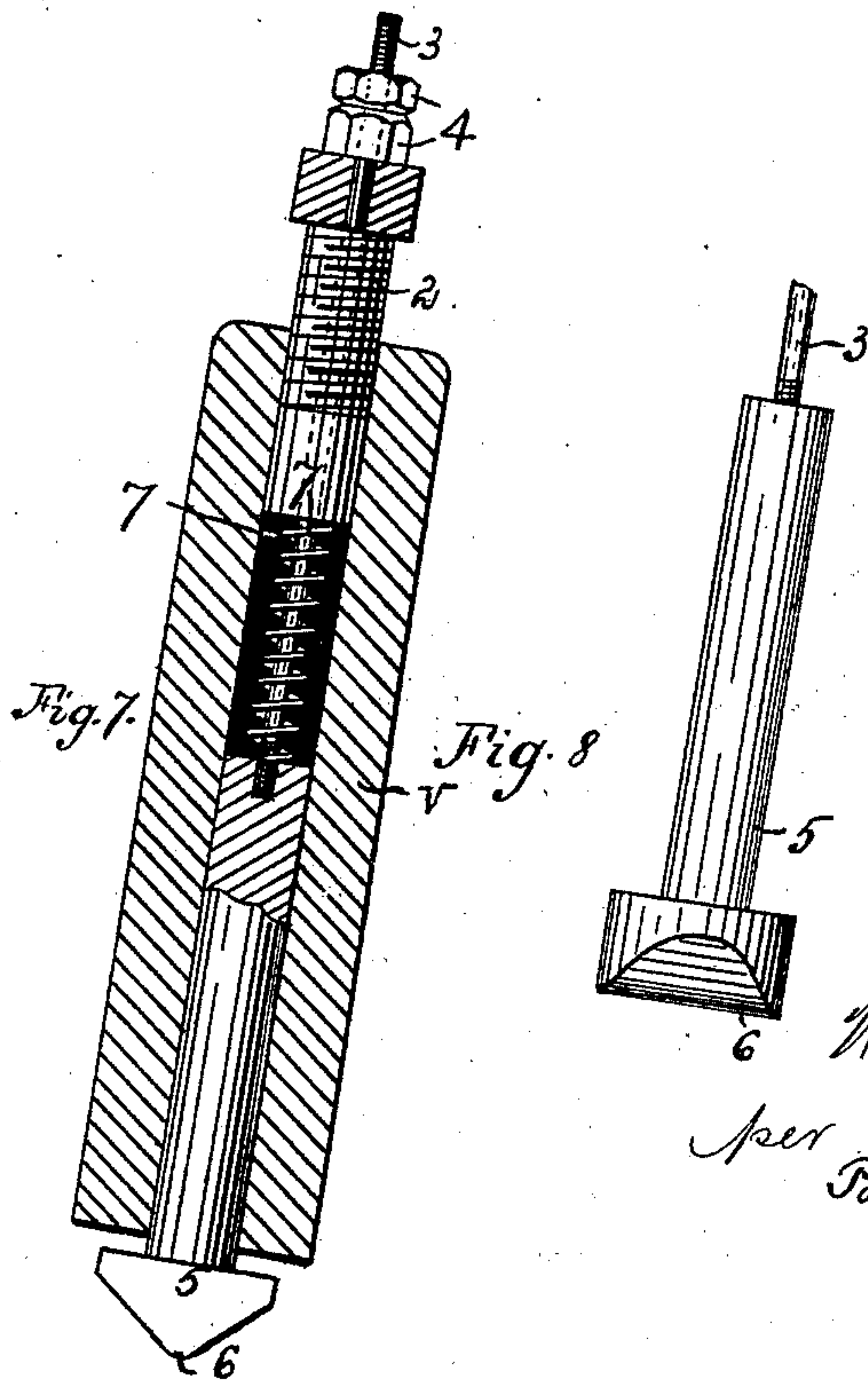
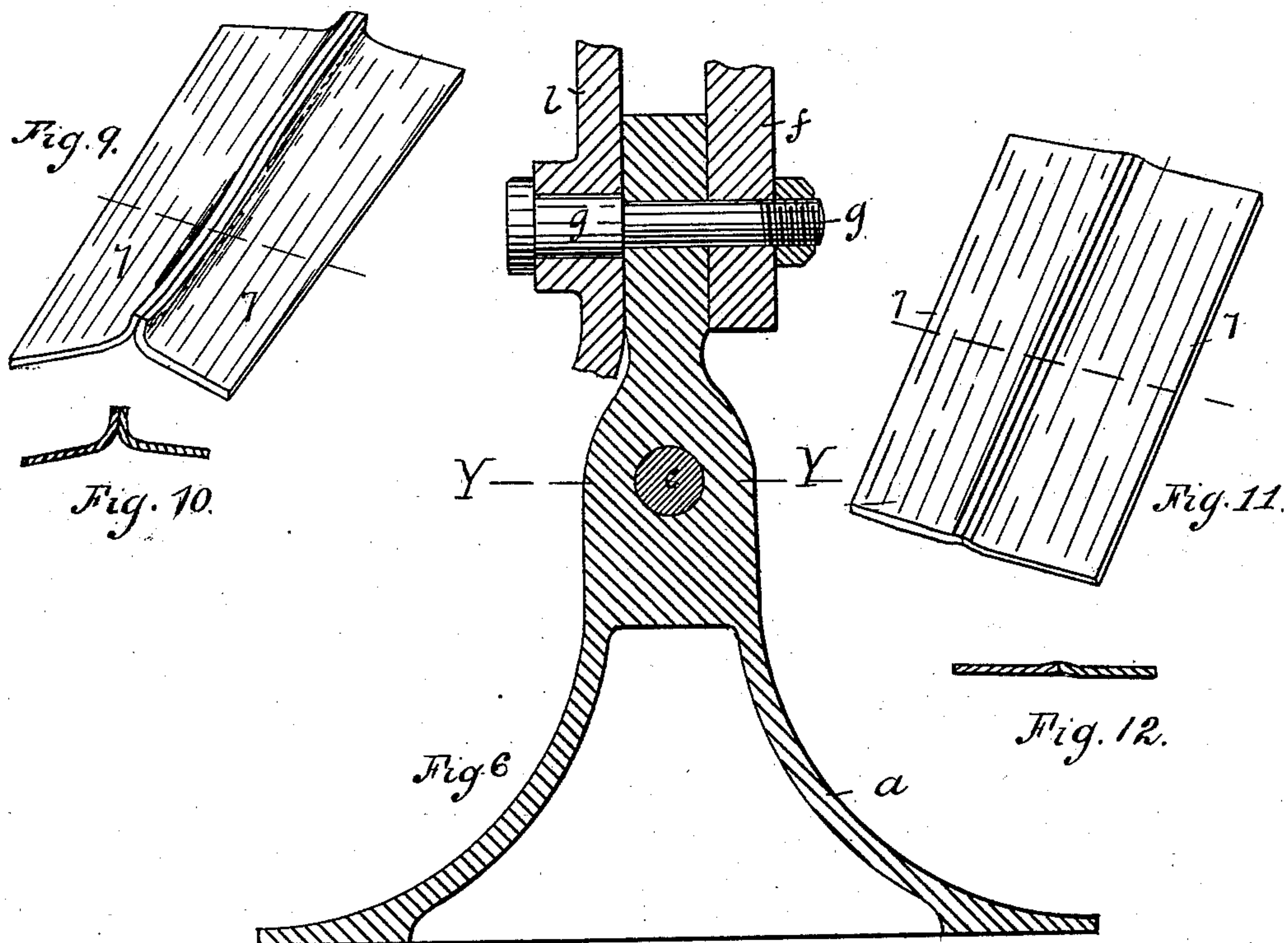
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UNITED STATES PATENT OFFICE.

WILLIAM Y. OBER, OF LYNN, MASSACHUSETTS.

MACHINE FOR FINISHING SEAMS.

SPECIFICATION forming part of Letters Patent No. 285,061, dated September 18, 1883.

Application filed May 19, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM Y. OBER, of Lynn, in the county of Essex and State of Massachusetts, have invented a new and useful
5 Improvement in Machines for Finishing Seams, which will, in connection with the accompanying drawings, be hereinafter fully described, and specifically defined in the appended claims.

This invention relates to a machine adapted
10 to press, roll, rub, and finish seams which unite the edges of two pieces of leather or other material; and it consists in the construction and combination of the divers devices embodied therein, as hereinafter more particularly and
15 fully set forth and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a machine embodying my invention. Fig. 2 is a front elevation of the machine shown in Fig. 1, and viewed as from the right in that figure. Fig. 3 is a top or plan
20 view of the machine shown in the two preceding figures. Fig. 4 is a sectional elevation, viewed as from the left in the preceding Figs. 1 and 3, the section being taken as on line *z*,
25 Figs. 1, 2, 3. Fig. 5 is a horizontal section taken on line *y y*, Figs. 1, 2, 4, 6. Fig. 6 is a vertical section taken as on line *x*, Figs. 1 and 3, and as viewed from the right in these figures. Fig. 7 is a sectional elevation, the section being taken on line *W*, Fig. 1, through
30 the head which carries the rubber, which latter is shown in edge elevation. Fig. 8 is a detached side elevation of the rubber. Fig. 9 is a perspective view of two pieces of leather
35 sewed together and shown as before being operated upon by my machine. Fig. 10 is a transverse section of Fig. 9. Fig. 11 is a perspective view of Fig. 10, but showing the seam as after passing through my machine. Fig. 12 is
40 a transverse view of Fig. 11.

In these views, *a* represents the standard of my machine, which is preferably formed with a base, as shown in Figs. 1, 2, 3, 6, and so as
45 to be conveniently secured to a bench, stand, or table for convenience of use.

In boxes or bearings *b b*, formed on said standard, is journaled the arbor *c*, which, at the front of the machine, carries the smooth-faced feed-wheel *d* and at the rear end the

tangent wheel or gear *e*, by which rotation of the arbor is effected. An extension or arm, *f*, is securely bolted to the head of standard *a* by bolt *g*, as is clearly shown in Figs. 3, 4, 6, and at its outer end terminates in the bearings *h h*, in which revolves a short arbor, *i*, which is
55 driven, in the usual manner, by a belt acting on fast and loose pulleys *j j*, mounted thereon, as shown. An endless screw, *k*, is secured on arbor *i*, between bearings *h*, and so as to enmesh and rotate tangent-wheel *e*, and thereby its arbor *c* and feed-wheel *d*, in the direction indicated by an arrow in Figs. 1, 2, 4.

Upon bolt *g* is pivotally mounted the curved arm *l*, whose lower arm is engaged by spring
60 *m*, which is attached to and adjustable by slide *n*, secured to and adjustable on standard *a*. The opposite or upper arm of lever *l* carries a curved flat spring, *p*, whose lower end is curved outward from wheel *d*, to admit the ready
65 passage of the leather or other material between the wheel and spring, which, above the end of the spring, are in contact when the leather is not interposed. A smooth-faced wheel, *s*, having a slight circumferential projection, is pivotally mounted upon the arm of
70 lever *l*, as shown in Figs. 1, 2, 3, and so as to act upon the material which passes between wheel *d* and spring *p*, as already described. Upon arbor *c*, between its bearings *b b*, is
80 loosely mounted a sleeve, *t*, from which rises the curved arm *u*, which terminates in head *v*, arranged over wheel *d*, and which carries the rubber that coacts with spring *p* and wheel *s* in finishing the seam, as will be described. A curved arm, *w*, extends horizontally from sleeve
85 *t*, and in its outer end is pivotally secured the stud *x*, in whose bifurcation is pivoted the lower extremity of pitman *y*, whose upper extremity or strap incloses eccentric *z*, formed upon fast pulley *j*, all as shown in Figs. 3, 4, 5.

It will be obvious that as pulley *j* is rotated its eccentric *z* will impart a vertical reciprocation to pitman *y*, and thereby to arm *w*, which latter will impart a rotary reciprocation to sleeve *t*, and this will vibrate arm *u*, so that
90 its head *v* will vibrate in the direction of the peripheral line of wheel *d*.

The "rubber," which has been referred to as

carried in head *v* of arm *w*, is described as follows: A set-screw, 2, is threaded in the upper end of head *v*, so as to be vertically adjustable therein. Through this set-screw the small rod 3 freely passes, and on the upper end of said rod are threaded the adjustable lock-nuts 4, as shown. The lower end of rod 3 is threaded in the stem of rubber 5, whose enlarged head is formed with a rounded edge, 6, which is arranged transverse to the line of motion of wheel *d*, as shown in Fig. 2, where said wheel is indicated by a dotted line. At the center of the wedge-like face 6 of rubber 5 is formed a slight rounded projection to enter between the parts 7 of the leather, which are united by sewing when the seams are being finished. A helical spring, 7, is seated on rod 3, between set-screw 2 and the end of the shank of rubber 5, and so tends to press the rubber against the seam when acting thereon. By taking hold of set-nuts 4 and exerting an upward force the rubber may be raised to allow the leather to enter between the wheel and rubber, after which spring 7 insures the contact of the rubber with the leather.

In use, the machine, being set in motion by the means described, will run uninterruptedly while being so used, and the operator, seated in front, as viewed in Fig. 1, will introduce with his left hand, between wheel *d* and spring *p*, the seamed leather or other material that is to be finished, the seam being arranged centrally upon the face of the wheel, and the motion of wheel *d* will carry the seam forward beneath spring *p* into contact with the small wheel *s*, the concentric ridge on which will enter the space between the two parts of leather seamed together, and so hold the same centrally on the wheel. The leather is thus fed forward and pressed flat by the action of spring *p* and wheels *d* *s*, and when it enters between wheel *d* and the rubber, which latter is being

vibrated by the means described, the seam is rubbed and finished smooth and solid, the leather passing out from between wheel *d* and the rubber, and being removed by the right hand of the operator. After one seamed article has entered the machine, as described, others will be successively placed in position to follow it, so that they pass in unbroken succession over wheel *d* and beneath spring *p*, wheel *s*, and rubber 5, whereby said devices uninterruptedly perform their functions upon the seam.

I claim as my invention—

1. In a seam-finishing machine, the combination, substantially as shown, of a continuous-feed mechanism, a compressing mechanism, and a reciprocating rubbing mechanism, all substantially as specified.

2. In a seam-finishing machine, the combination of the rotary supporting-wheel *d*, the presser-wheel *s*, and vibrating rubber 5, substantially as specified.

3. In combination with the supporting-wheel *d* and the pressing and rubbing devices, the yielding spring *p*, arranged to coact with said wheel, substantially as specified.

4. The combination of supporting-wheel *d*, with means for rotating it, the spring-actuated lever *l*, with its bearing-spring *p* and compressing-wheel *s*, and rubber 5, with means to vibrate the same, substantially as specified.

5. The combination of arbor *i*, screw *k*, tangent-wheel *e* and arbor *c*, eccentric *z*, pitman *y*, connected by arm *w* with sleeve *t*, lever *l*, with its spring *p* and wheel *s*, supporting-wheel *d*, and a vibrating rubber carried by arm *u*, all substantially as specified.

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Witnesses:

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